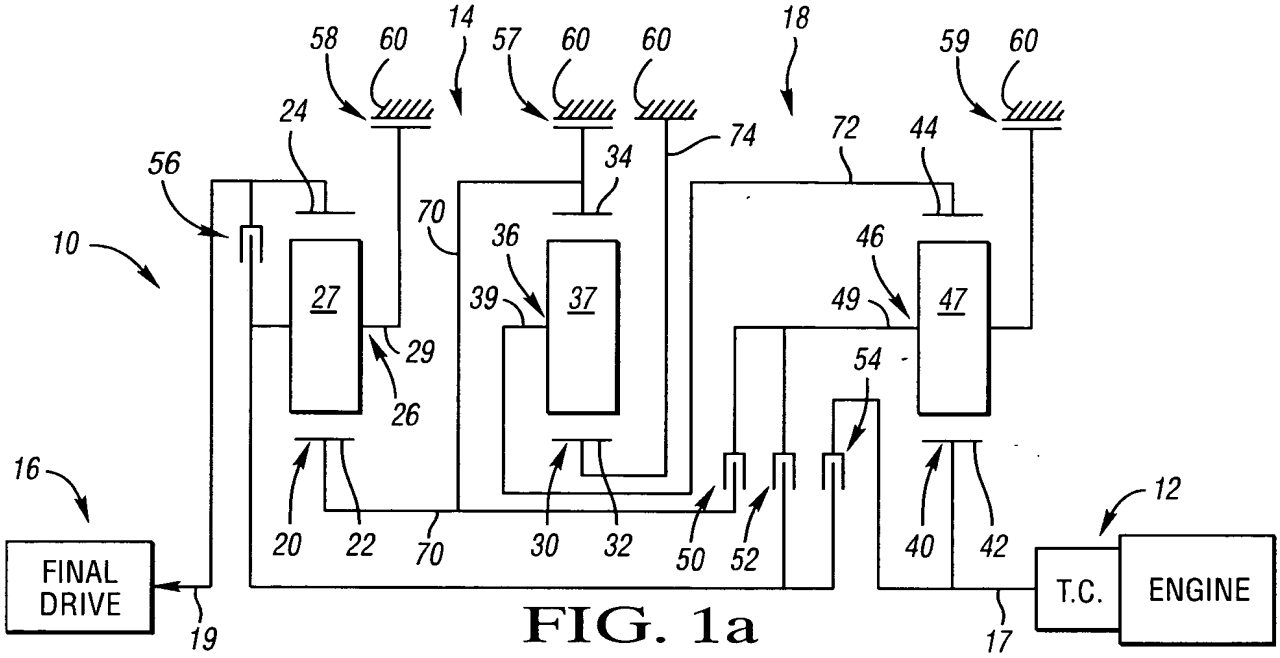

FIG. 1a

FIG. 1b

	RATIOS	50	52	54	56	57	58	59
REVERSE 2	-4.09	X					X	
REVERSE 1	2.10				X			X
NEUTRAL	0.00		X					
1	4.72		X				X	
2	2.71		X			X		
3	1.82	X	X					
4	1.21		X	X				
5	1.00			X	X			
6	0.84	X		X				
7	0.69			X		X		
8	0.60			X				X

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.25$, $\frac{N_{R2}}{N_{S2}} = 2.57$, $\frac{N_{R3}}{N_{S3}} = 2.91$

RATIO SPREAD	7.82
RATIO STEPS	
REV2/1	-0.87
1/2	1.74
2/3	1.49
3/4	1.50
4/5	1.21
5/6	1.20
6/7	1.20
7/8	1.15

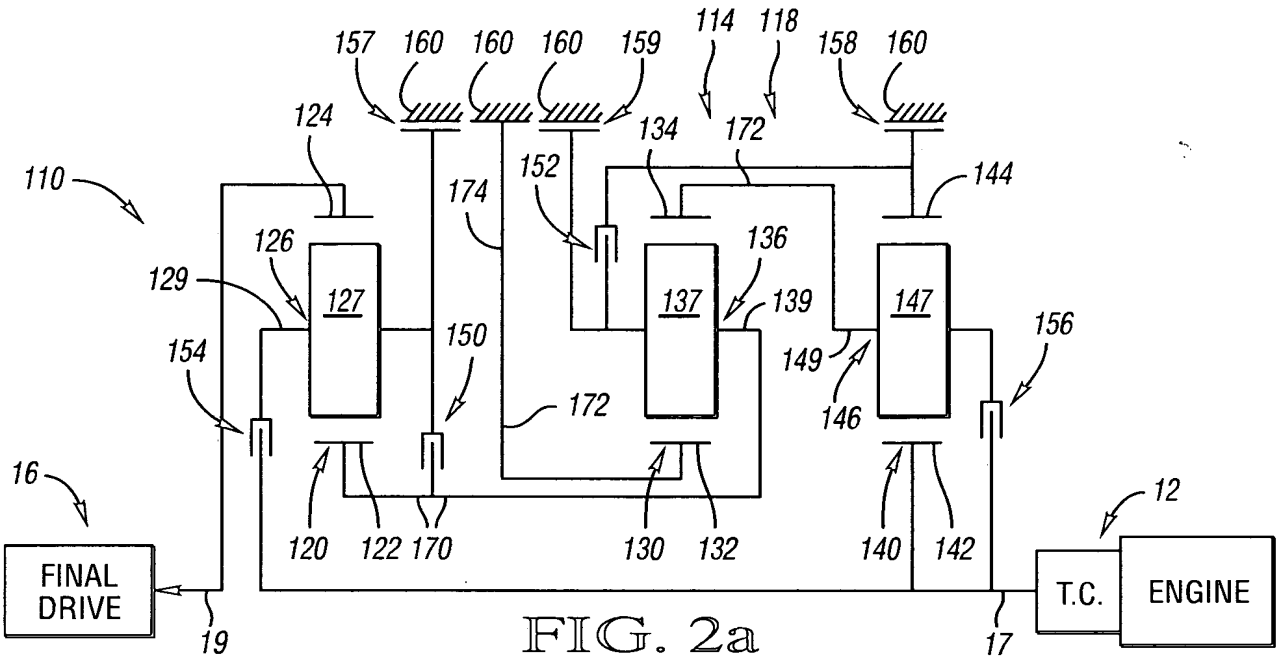

FIG. 2a

FIG. 2b

	RATIOS	150	152	154	156	157	158	159
REVERSE 3	-8.79					X	X	
REVERSE 2	-4.85		X			X		
REVERSE 1	-2.70				X	X		
NEUTRAL	0.00	X						
1	5.02	X					X	
2	2.77	X	X					
3	1.54	X			X			
4	1.00	X		X				
5	0.83			X	X			
6	0.73		X	X				
7	0.69			X			X	
8	0.64			X				X

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 1.75$, $\frac{N_{R2}}{N_{S2}} = 1.84$, $\frac{N_{R3}}{N_{S3}} = 2.25$

RATIO SPREAD	7.88
RATIO STEPS	
REV2/1	-0.97
1/2	1.81
2/3	1.79
3/4	1.54
4/5	1.20
5/6	1.14
6/7	1.07
7/8	1.08

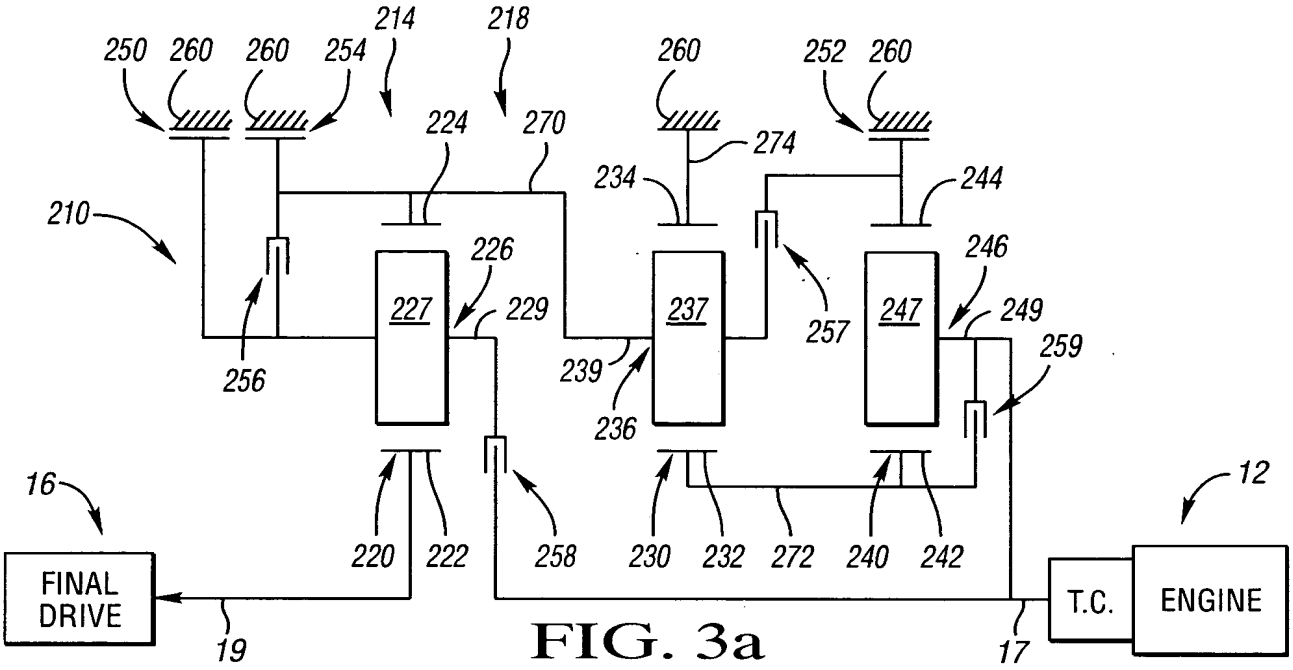

FIG. 3a

FIG. 3b

	RATIOS	250	252	254	256	257	258	259
REVERSE 3	-2.24	X						X
REVERSE 2	-1.21	X				X		
REVERSE 1	-0.82	X	X					
NEUTRAL	0.00				X			
1	3.65				X			X
2	1.97				X	X		
3	1.34		X		X			
4	1.00				X		X	
5	0.71		X				X	
6	0.55					X	X	
7	0.46						X	X
8	0.38			X			X	

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 1.63$, $\frac{N_{R2}}{N_{S2}} = 2.65$, $\frac{N_{R3}}{N_{S3}} = 1.72$

RATIO SPREAD	9.62
RATIO STEPS	
REV3/1	-0.61
1/2	1.85
2/3	1.47
3/4	1.34
4/5	1.42
5/6	1.28
6/7	1.21
7/8	1.20

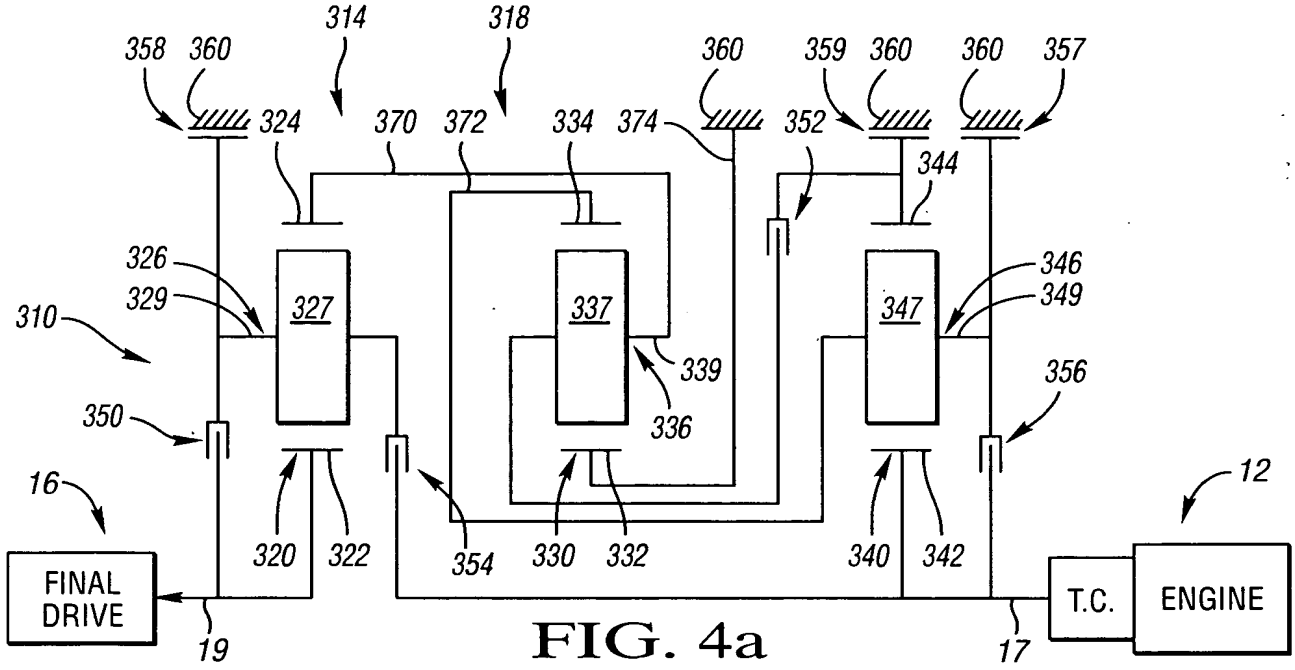

FIG. 4a

FIG. 4b

	RATIOS	350	352	354	356	357	358	359
REVERSE 3	-3.58						X	X
REVERSE 2	-1.57		X				X	
REVERSE 1	-0.89				X		X	
NEUTRAL	0.00							X
1	5.35	X						X
2	2.35	X	X					
3	1.34	X			X			
4	1.00	X		X				
5	0.73			X	X			
6	0.54		X	X				
7	0.45			X				X
8	0.40			X		X		

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 1.50$, $\frac{N_{R2}}{N_{S2}} = 2.97$, $\frac{N_{R3}}{N_{S3}} = 3.00$

RATIO SPREAD	13.36
RATIO STEPS	
REV3/1	-0.67
1/2	2.28
2/3	1.76
3/4	1.34
4/5	1.38
5/6	1.35
6/7	1.19
7/8	1.13

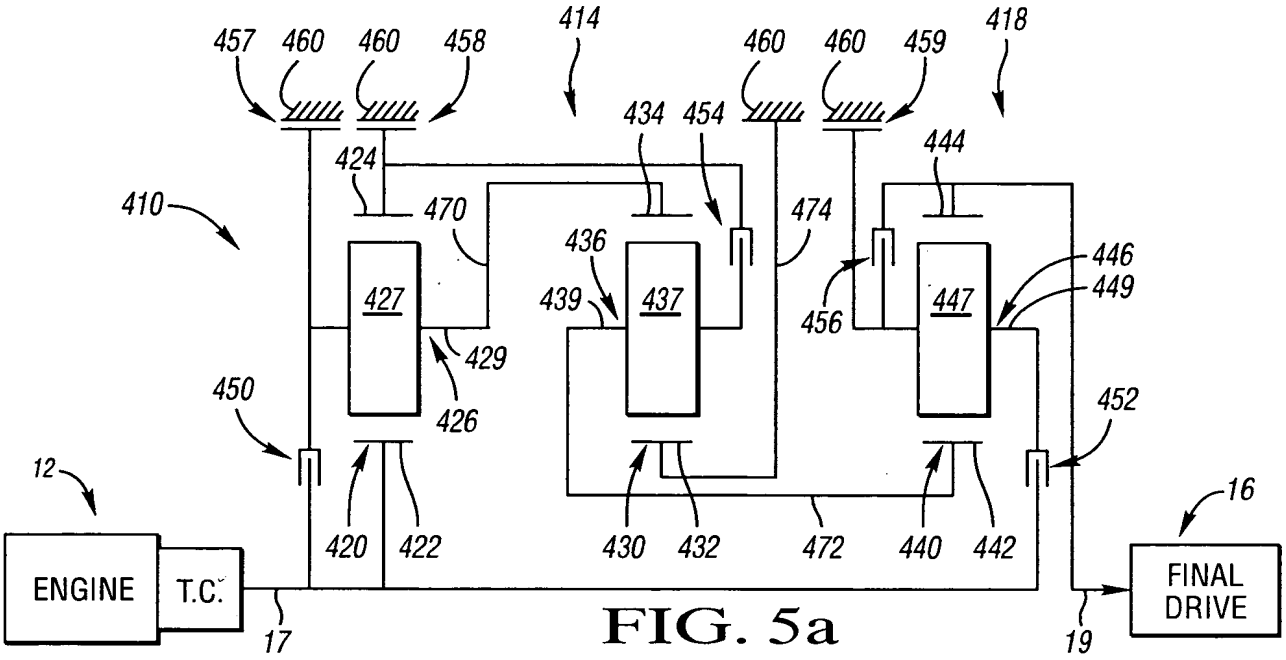

FIG. 5a

FIG. 5b

	RATIOS	450	452	454	456	457	458	459
REVERSE 3	-10.16						X	X
REVERSE 2	-5.62			X				X
REVERSE 1	-2.59	X						X
NEUTRAL	0.00						X	
1	6.56				X		X	
2	3.63			X	X			
3	1.67	X			X			
4	1.00		X		X			
5	0.79	X	X					
6	0.68		X	X				
7	0.65		X				X	
8	0.61		X			X		

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.92$, $\frac{N_{R2}}{N_{S2}} = 1.49$, $\frac{N_{R3}}{N_{S3}} = 1.55$

RATIO SPREAD	10.78
RATIO STEPS	
REV2/1	-0.86
1/2	1.81
2/3	2.17
3/4	1.67
4/5	1.26
5/6	1.17
6/7	1.05
7/8	1.06

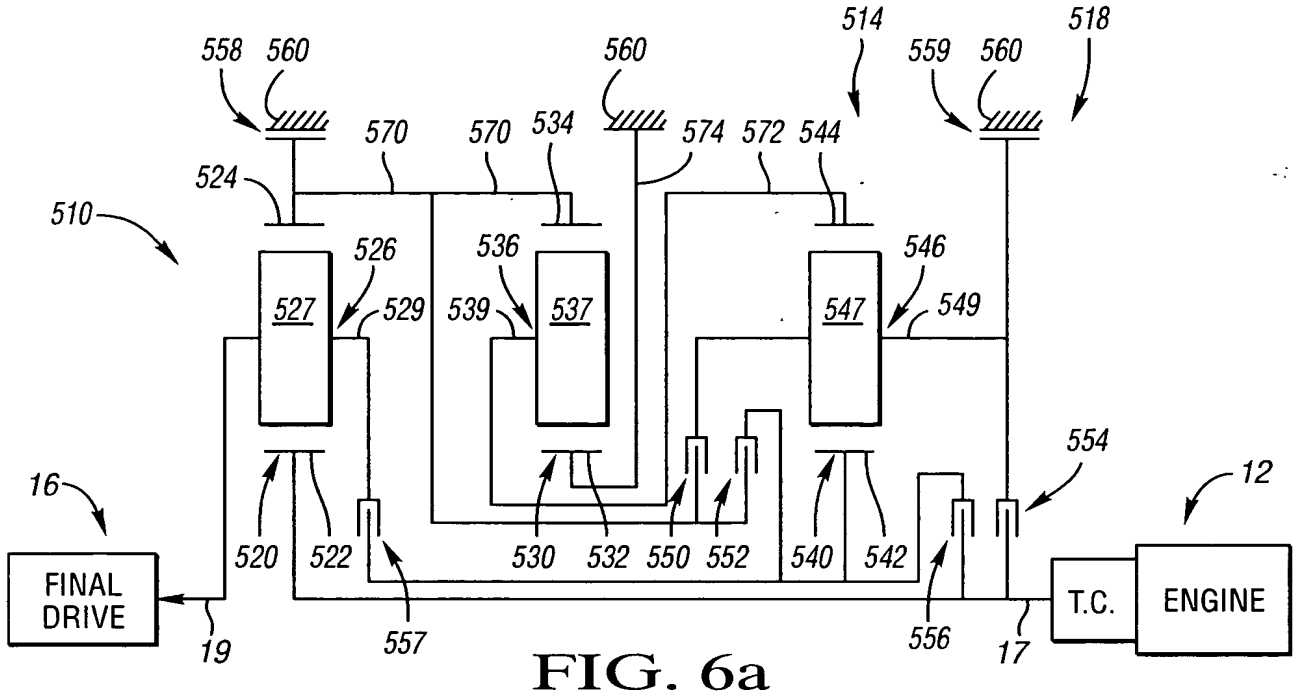

FIG. 6a

FIG. 6b

	RATIOS	550	552	554	556	557	558	559
REVERSE	-7.57				X			X
NEUTRAL								X
1	4.42					X		X
2	3.02					X	X	
3	1.99	X				X		
4	1.49	X			X			
5	1.00	X		X				
6	0.79		X	X				
7	0.76			X		X		
8	0.69			X	X			

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.02$, $\frac{N_{R2}}{N_{S2}} = 1.50$, $\frac{N_{R3}}{N_{S3}} = 2.41$

RATIO SPREAD	6.40
RATIO STEPS	
REV/1	-1.71
1/2	1.46
2/3	1.52
3/4	1.34
4/5	1.49
5/6	1.26
6/7	1.03
7/8	1.10

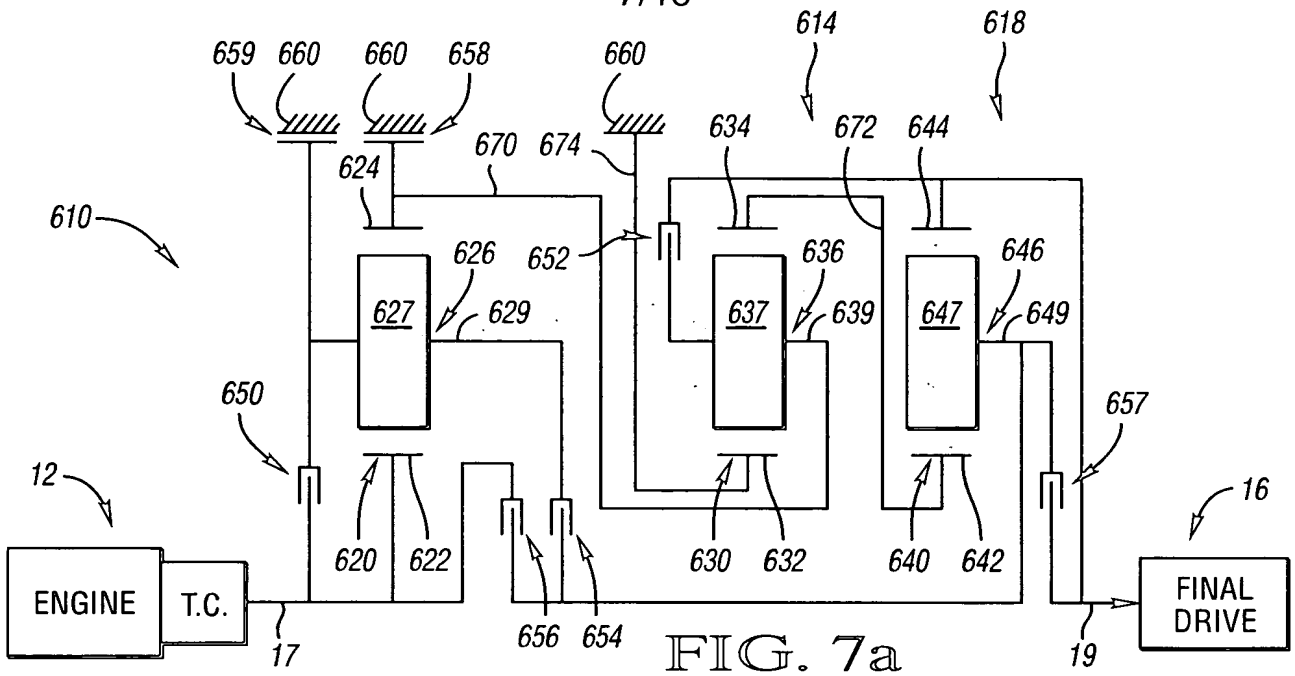

FIG. 7a

FIG. 7b

	RATIOS	650	652	654	656	657	658	659
REVERSE 2	-3.01		X					X
REVERSE 1	-2.14					X		X
NEUTRAL	0.00							X
1	6.44			X				X
2	3.01			X			X	
3	1.87			X		X		
4	1.41		X	X				
5	1.16			X	X			
5'	1.10		X		X			
6	1.00				X	X		
7	0.75				X		X	
7'	0.71	X				X		
8	0.67				X			X

(X = ENGAGED CLUTCH)

RING GEAR / SUN GEAR TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 3.01$, $\frac{N_{R2}}{N_{S2}} = 2.45$, $\frac{N_{R3}}{N_{S3}} = 3.02$

RATIO SPREAD	9.58
RATIO STEPS	
REV2/1	-0.47
1/2	2.14
2/3	1.61
3/4	1.33
4/5	1.22
5/6	1.16
6/7	1.33
7/8	1.12

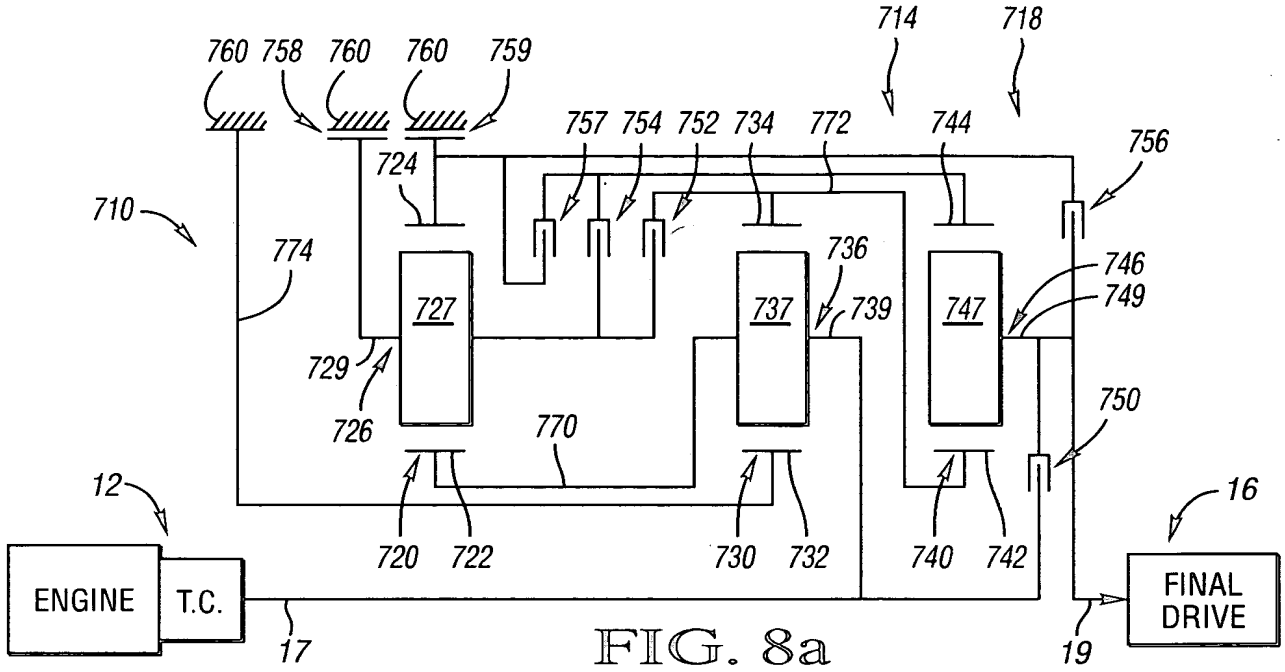

FIG. 8a

FIG. 8b

	RATIOS	750	752	754	756	757	758	759
REVERSE	-2.63				X		X	
NEUTRAL	0.00						X	
1	5.36					X	X	
2	2.24			X			X	
3	1.57			X				X
4	1.00	X		X				
5	0.88			X		X		
6	0.80			X	X			
7	0.71		X	X				
8	0.66		X			X		
9	0.64		X		X			

(X = ENGAGED CLUTCH)

RING GEAR / SUN GEAR TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.63$, $\frac{N_{R2}}{N_{S2}} = 2.45$, $\frac{N_{R3}}{N_{S3}} = 2.15$

RATIO SPREAD	8.38
RATIO STEPS	
REV/1	-0.49
1/2	2.39
2/3	1.43
3/4	1.57
4/5	1.14
5/6	1.10
6/7	1.13
7/8	1.08
8/9	1.03

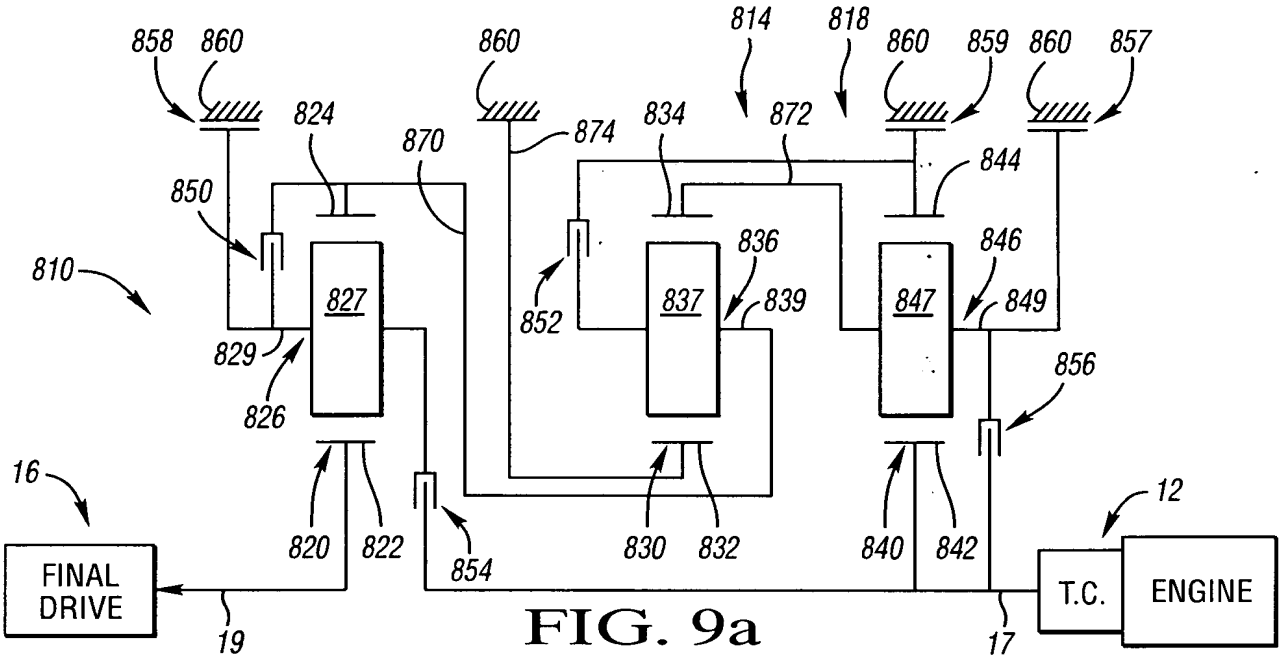

FIG. 9a

FIG. 9b

	RATIOS	850	852	854	856	857	858	859
REVERSE 3	-1.84						X	X
REVERSE 2	-0.96		X				X	
REVERSE 1	-0.67				X		X	
NEUTRAL	0.00							X
1	3.68	X						X
2	1.93	X	X					
3	1.34	X			X			
4	1.00	X		X				
5	0.66			X	X			
6	0.51		X	X				
7	0.41			X				X
8	0.33			X		X		

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.00$, $\frac{N_{R2}}{N_{S2}} = 2.97$, $\frac{N_{R3}}{N_{S3}} = 1.75$

RATIO SPREAD	11.03
RATIO STEPS	
REV3/1	-0.50
1/2	1.91
2/3	1.44
3/4	1.34
4/5	1.50
5/6	1.30
6/7	1.25
7/8	1.22

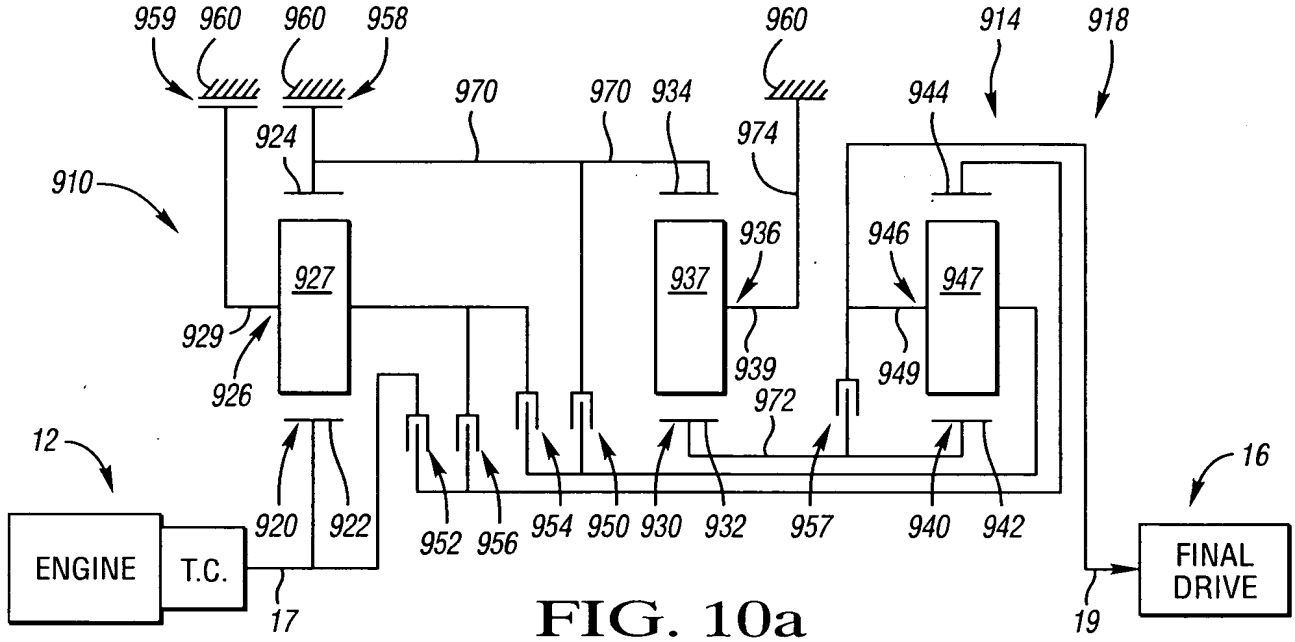

FIG. 10a

FIG. 10b

	RATIOS	950	952	954	956	957	958	959
REVERSE 2	-4.95		X		X			
REVERSE 1	-1.73	X						X
NEUTRAL	0.00				X			
1	6.08	X			X			
2	4.23				X		X	
3	3.45			X	X			
4'	2.86	X	X					
4	2.73			X			X	
5	2.06		X	X				
6	1.55		X				X	
7	1.00		X			X		
8	0.88		X					X
9	0.72					X		X

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 1.58$, $\frac{N_{R2}}{N_{S2}} = 2.39$, $\frac{N_{R3}}{N_{S3}} = 1.82$

RATIO SPREAD	8.44
RATIO STEPS	
REV2/1	-0.81
1/2	1.44
2/3	1.23
3/4	1.26
4/5	1.33
5/6	1.33
6/7	1.55
7/8	1.14
8/9	1.22

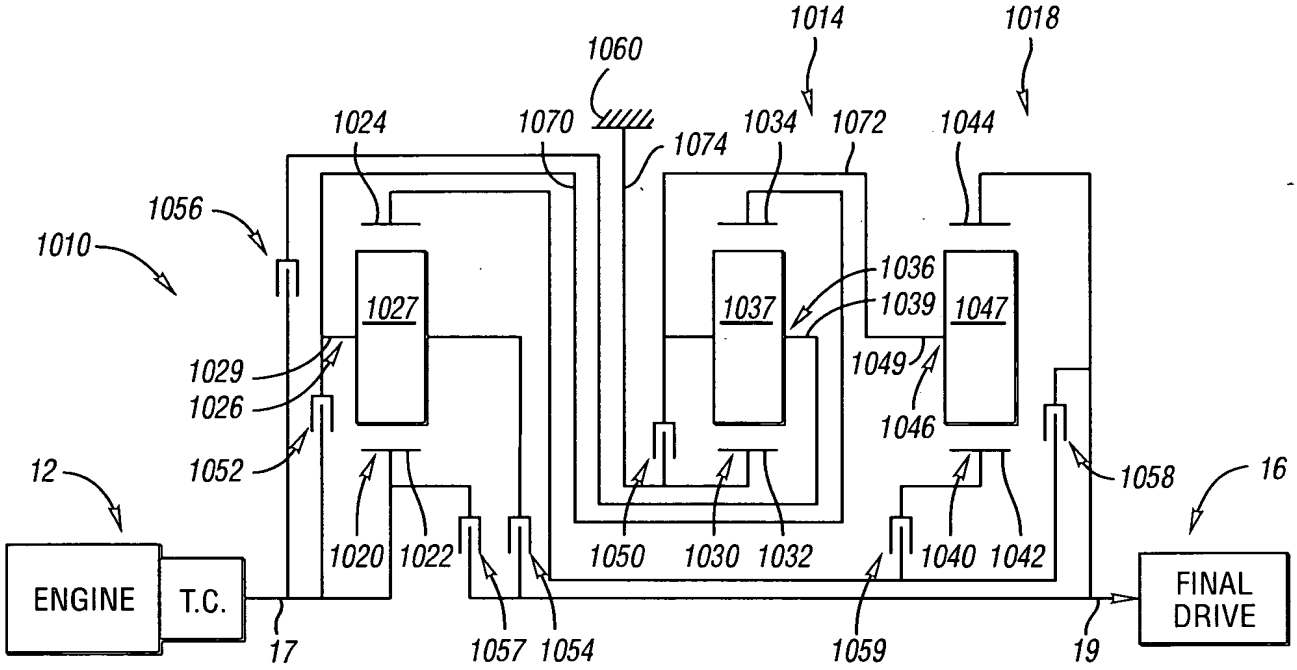

FIG. 11a

FIG. 11b

	RATIOS	1050	1052	1054	1056	1057	1058	1059
REVERSE	-2.93	X					X	
NEUTRAL	0.00	X						
1	7.03	X						X
2	4.67			X				X
3	3.30						X	X
4	2.10		X					X
5	1.49				X			X
6	1.00				X	X		
7	0.63			X	X			
8	0.56				X		X	

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.92$, $\frac{N_{R2}}{N_{S2}} = 1.71$, $\frac{N_{R3}}{N_{S3}} = 2.40$

RATIO SPREAD	12.53
RATIO STEPS	
REV/1	-0.42
1/2	1.50
2/3	1.42
3/4	1.57
4/5	1.41
5/6	1.48
6/7	1.58
7/8	1.13

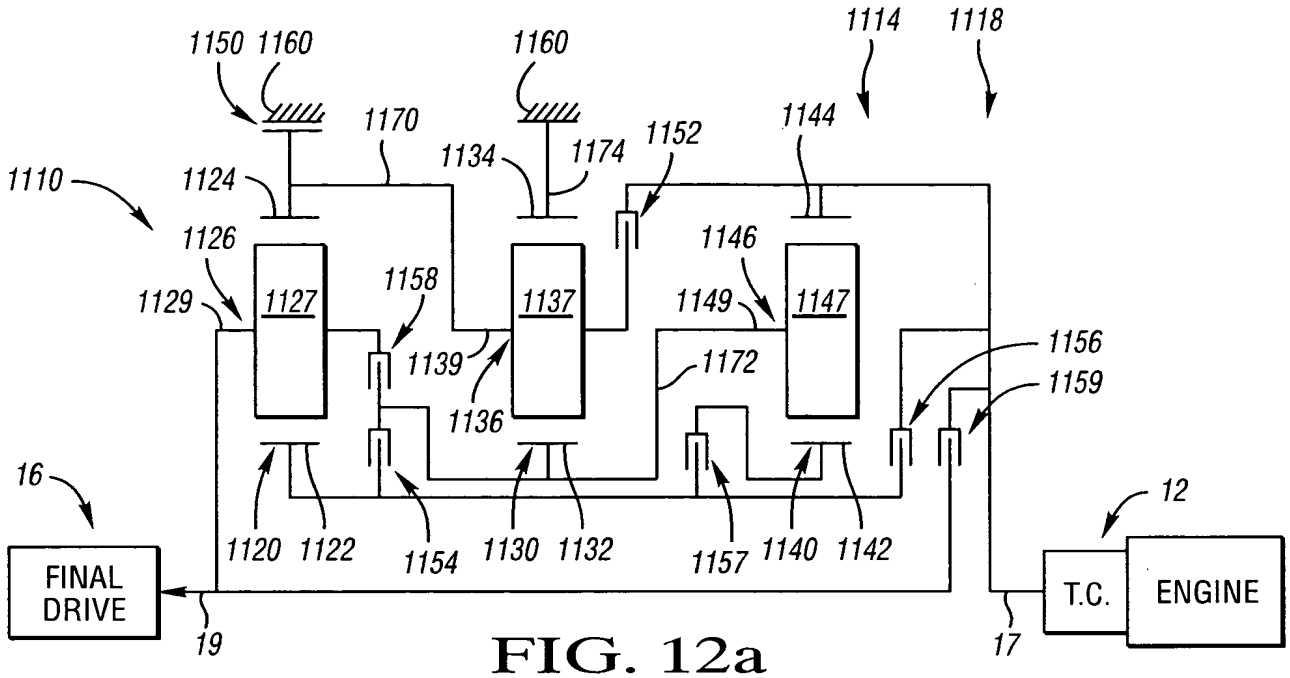

FIG. 12a

FIG. 12b

	RATIOS	1150	1152	1154	1156	1157	1158	1159
REVERSE	-1.61	X				X		
NEUTRAL	0.00	X						
1	3.62	X			X			
2	2.57				X		X	
3	1.77			X	X			
4	1.00		X					X
5	0.71		X	X				
6	0.42		X			X		
7	0.40		X				X	
8	0.30					X	X	

(X = ENGAGED CLUTCH)

RING GEAR / SUN GEAR TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.62$, $\frac{N_{R2}}{N_{S2}} = 1.66$, $\frac{N_{R3}}{N_{S3}} = 2.25$

RATIO SPREAD	12.05
RATIO STEPS	
REV/1	-0.44
1/2	1.40
2/3	1.45
3/4	1.77
4/5	1.42
5/6	1.66
6/7	1.06
7/8	1.33

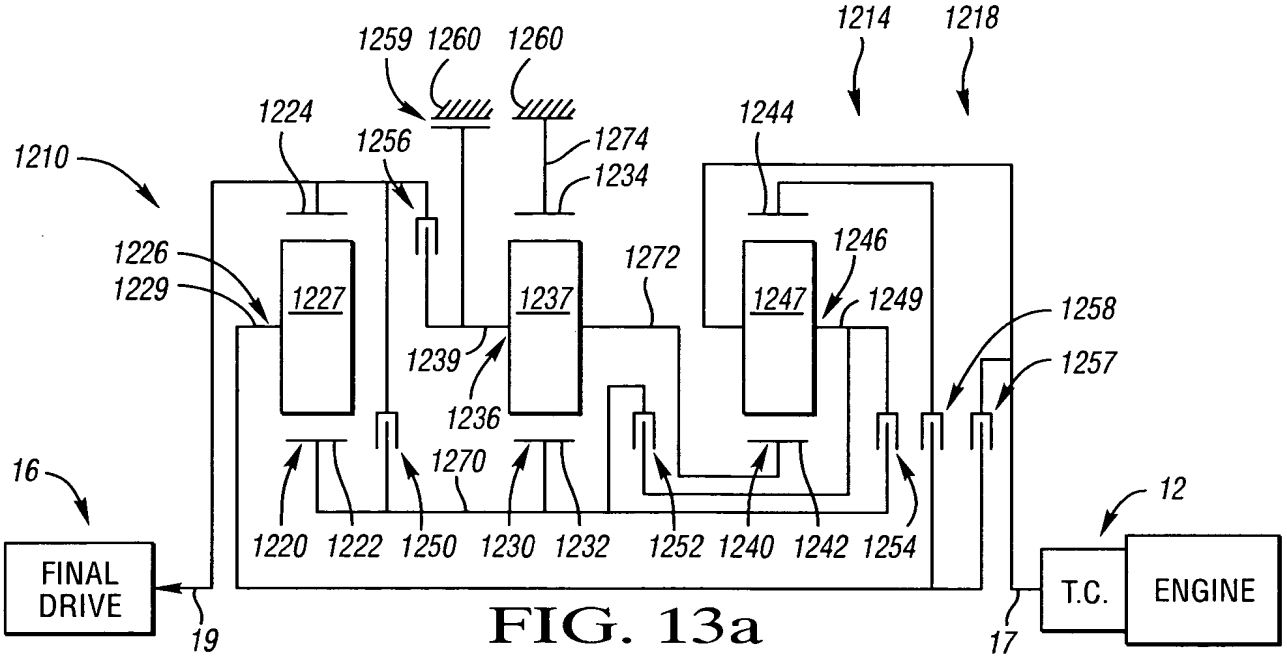

FIG. 13a

FIG. 13b

	RATIOS	1250	1252	1254	1256	1257	1258	1259
REVERSE	-3.01					X	X	
NEUTRAL	0.00				X			
1	4.00		X		X			
2	2.82			X	X			
3	1.92				X	X		
3'	1.56				X		X	
4	1.23			X		X		
5	1.00	X				X		
6	0.71	X					X	
6'	0.69					X		X
7	0.59		X				X	
8	0.42						X	X

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.25$, $\frac{N_{R2}}{N_{S2}} = 3.00$, $\frac{N_{R3}}{N_{S3}} = 1.55$

RATIO SPREAD	9.50
RATIO STEPS	
REV/1	-0.75
1/2	1.42
2/3	1.48
3/4	1.57
4/5	1.23
5/6	1.42
6/7	1.20
7/8	1.40

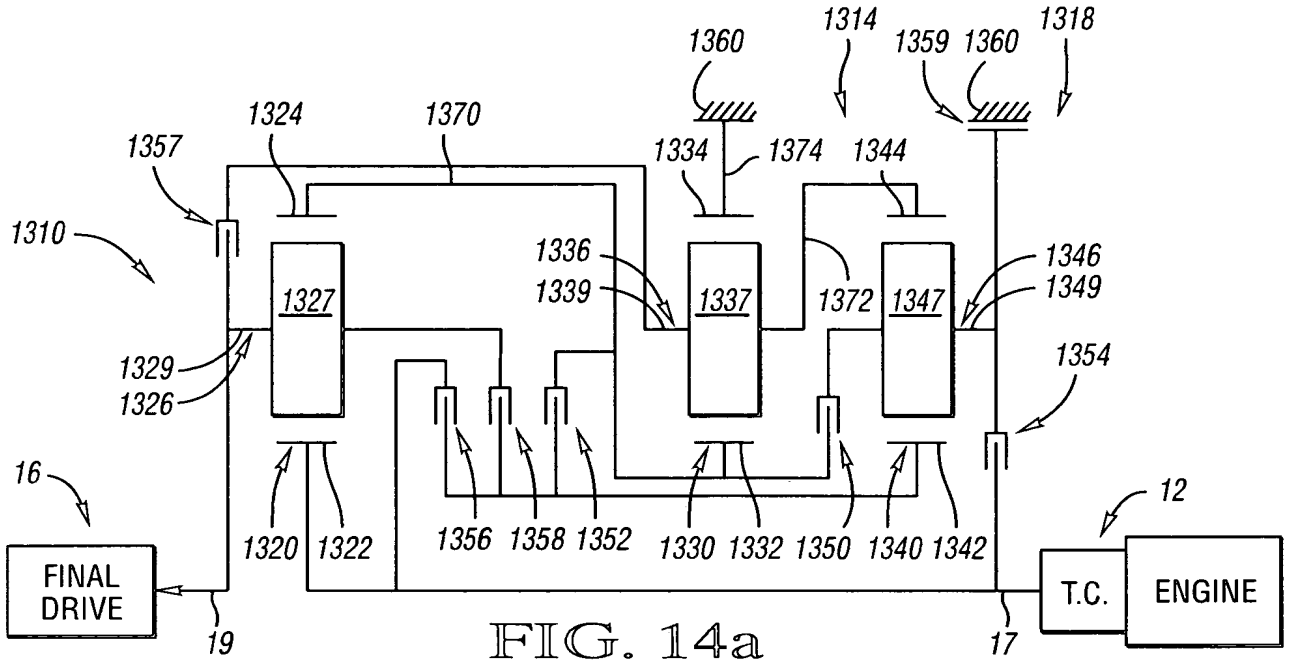

FIG. 14a

FIG. 14b

	RATIOS	1350	1352	1354	1356	1357	1358	1359
REVERSE 2	-2.79					X		X
REVERSE 1	-1.62				X			X
NEUTRAL	0.00							X
1	5.89						X	X
2	3.02	X						X
3	2.15	X					X	
4	1.62	X			X			
5	1.00	X		X				
6	0.66		X	X				
7	0.61			X			X	
8	0.44			X	X			

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 2.02$, $\frac{N_{R2}}{N_{S2}} = 1.87$, $\frac{N_{R3}}{N_{S3}} = 2.03$

RATIO SPREAD	13.28
RATIO STEPS	
REV2/1	-0.47
1/2	1.95
2/3	1.40
3/4	1.33
4/5	1.62
5/6	1.52
6/7	1.08
7/8	1.37

FIG. 15a

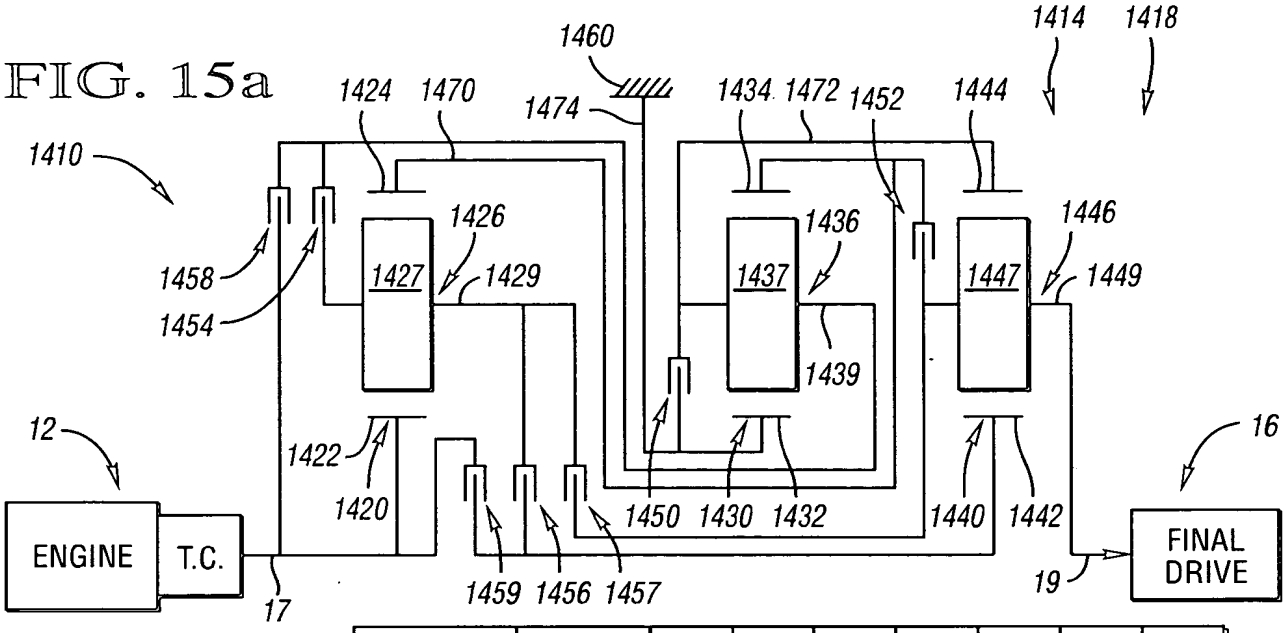

FIG. 15b

	RATIOS	1450	1452	1454	1456	1457	1458	1459
REVERSE 3	-1.65			X				X
REVERSE 2	-0.76			X		X		
REVERSE 1	-0.48		X	X				
NEUTRAL	0.00	X						
1'	13.03	X			X			
1"	4.33		X		X			
1	4.01	X				X		
2	3.25	X						X
3	2.58					X		X
4	1.83		X					X
5	1.34				X			X
6	1.00						X	X
7	0.88				X		X	
8	0.70					X	X	
9	0.63		X				X	

(X = ENGAGED CLUTCH)

RING GEAR / SUN GEAR TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 3.01$, $\frac{N_{R2}}{N_{S2}} = 1.71$, $\frac{N_{R3}}{N_{S3}} = 2.25$

RATIO SPREAD	6.37
RATIO STEPS	
REV3/1	-0.41
1/2	1.23
2/3	1.26
3/4	1.41
4/5	1.37
5/6	1.34
6/7	1.14
7/8	1.26
8/9	1.11

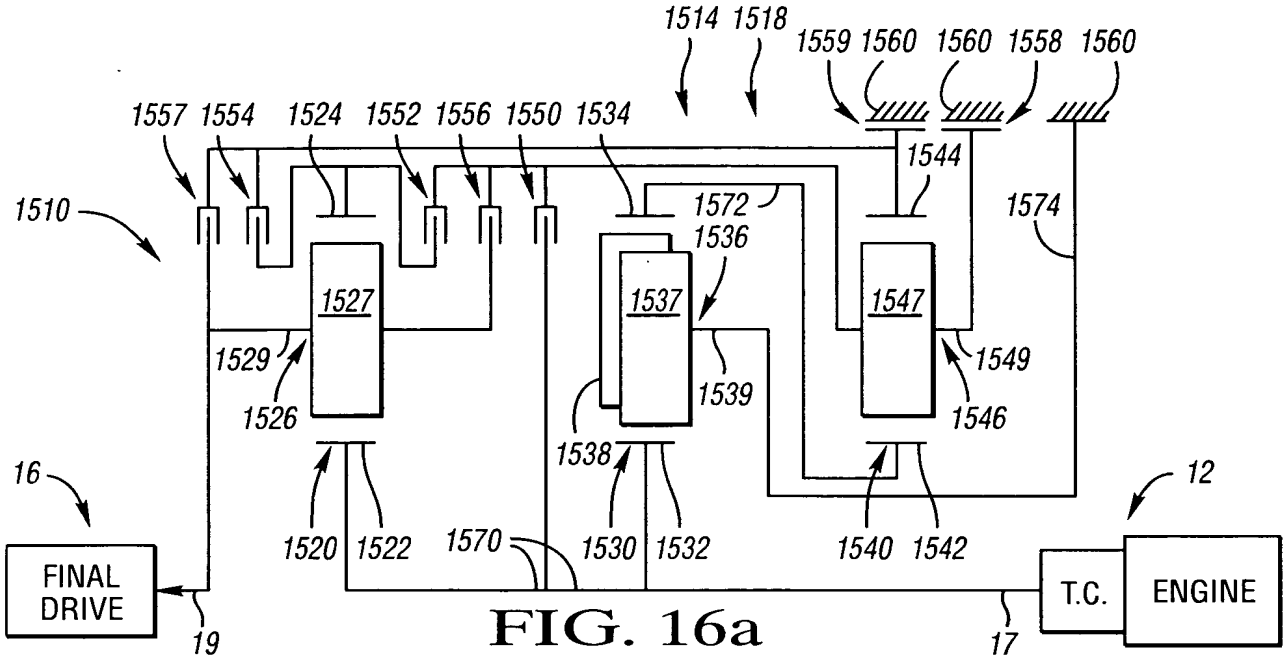

FIG. 16a

FIG. 16b

	RATIOS	1550	1552	1554	1556	1557	1558	1559
REVERSE 2	-4.45					X	X	
REVERSE 1	-2.86			X	X			
NEUTRAL	0.00							X
1'	12.25			X			X	
1	7.32				X			X
2	4.00			X				X
3'	2.87				X	X		
3	2.84		X					X
4	1.96		X	X				
5	1.54		X			X		
6	1.00	X	X					
7	0.76	X		X				
8	0.70	X				X		

(X = ENGAGED CLUTCH)

$\frac{\text{RING GEAR}}{\text{SUN GEAR}}$ TOOTH RATIO: $\frac{N_{R1}}{N_{S1}} = 3.00$, $\frac{N_{R2}}{N_{S2}} = 2.87$, $\frac{N_{R3}}{N_{S3}} = 1.50$

RATIO SPREAD	10.40
RATIO STEPS	
REV2/1	-0.61
1/2	1.83
2/3	1.41
3/4	1.45
4/5	1.27
5/6	1.54
6/7	1.32
7/8	1.08